BIAMP®

Vocia®

MS-1

Operation Manual

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VOCIA MESSAGE SERVER 1 (MS-1)

The MS-1 is a networked message server that supports many global paging functions in a Vocia® system, including message playback, event scheduling, VoIP paging interface, logging and remote access. The MS-1 acts as a central repository for the system configuration in addition to the locally-stored device files and enables plug and play device configuration and replacement. The MS-1 uses Ethernet-based control protocols in conjunction with CobraNet® to function within a Vocia system. In addition, the MS-1 supports inter-world paging and communications via IP.

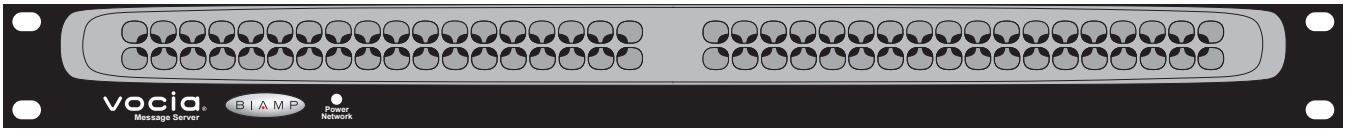
FEATURES

- Recorded message storage and playback
- Event scheduling
- Storage of logged system data
- VoIP paging interface
- Inter-world paging support
- System configuration storage and service
- Time server support
- Digital audio and control data over CobraNet
- Remote third party control capability
- Status LED
- Separate Ethernet ports for IP Control, CobraNet and VoIP
- CobraNet audio with dynamic use of available bundles
- Rotary switches for unit identification
- Rack mountable (1RU)
- **CE** marked and **RoHS** compliant
- Covered by BIAMP Systems' five-year warranty

MS-1 FRONT PANEL

Setup and Use

The Vocia software provides an intuitive interface for configuration of the MS-1. The information supplied by this manual relates to physical connections and assignment. For more details on software setup, please consult the Vocia Help File.

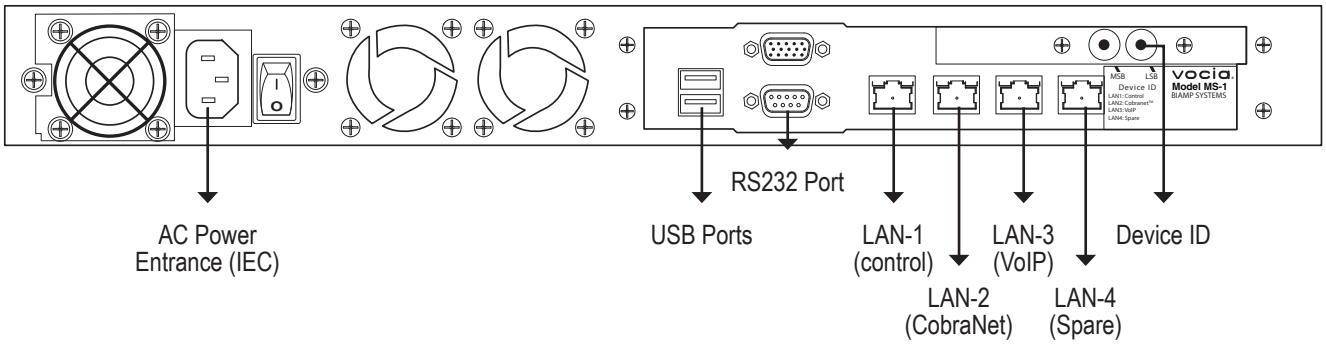


Front Panel

The MS-1 features one power indication LED on the front panel:

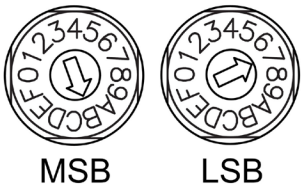
1. Not illuminated: The device is not powered.
2. Flashing green: The unit is receiving power but not data, or the unit has not been configured correctly.
3. Solid green: The unit is operational. Power supply and network traffic are functional.

MS-1 REAR PANEL



Device ID

The rotary ID switches are located on the back of the MS-1 and give the unit a unique Device ID. The switches are in hexadecimal format. All MS-1 units must have a unique Device ID to function properly within a Vocia Paging World (i.e., it is not possible to have two MS-1 units with the same Device ID of hex 07). To assign a Device ID of hex 07, turn the LSB switch to 7 and leave the MSB switch on 0. To create an ID of hex B7, turn the LSB switch to 7 and turn the MSB switch to B. Device ID switches should be set using a 0.1 inch (2.5mm) to 0.12 inch (3.0mm) flat blade screwdriver. More information on setting IDs and the hexadecimal numbering scheme used in Vocia can be found in the Vocia Help File.



Please note: Changes made to the Device ID while connected to the network require a power cycle in order to take effect.

Network Connection

The MS-1 has four RJ45 Ethernet connectors located on the rear panel (Control, Vocia Network, VoIP, and Spare). Each connector has two green LEDs, which display Ethernet Link (left LED) and Activity (right LED). Unlike other Vocia devices, the MS-1 does not display the status of the CobraNet conductor. By default the MS-1 takes on the role of CobraNet conductor (time synch master).

LAN-1 Connector (Control)

This port connects the MS-1 to a control network. This should be separate to the LAN that is being used by the CobraNet port either physically or through the use of managed switches and VLANs. The MS-1 can be configured in the Vocia software interface via this port, and as such it should be connected to the same network as the configuration PC during set up. It also supports inter-world paging and communications.

LAN-2 Connector (CobraNet)

This port is used to communicate with local Vocia devices and as such should be connected to the same network as the local Vocia system. The data from the CobraNet network should be placed on its own LAN, either physically or through the use of managed switches and VLANs. Vocia makes dynamic use of available bundles in CobraNet. Vocia devices are currently not interoperable with non-Vocia devices.

LAN-3 Connector (VoIP)

The VoIP port is used to host VoIP functionality for the MS-1. All configuration of this port is done via the Vocia software interface. Connection should be made to the same network as other VoIP infrastructure within the facility.

LAN-4 Connector (Spare)

This port is inactive at this time.

AC Power Entrance (IEC)

The IEC power entrance provides for connection of the appropriate power cord (included with unit). An internal universal switching power supply accepts 100~240VAC @ 50/60Hz, with a maximum power consumption of 350 watts.

CAUTION: Do not remove or defeat the ground prong on the power cord, as this will constitute a shock hazard. Equipment should be connected to a mains socket outlet with a protective earthing connection. This plug is the main disconnecting device and should remain readily operable. There are no user interchangeable parts. Please contact Biamp Technical Support or your local distributor for all service requirements.

USB Ports

These ports are inactive at this time.

RS-232 Port

This port is used to support console access to the MS-1. Settings for connection are as follows: Baud rate 57600, Data bits 8, Parity None, Stop bits 1, and Flow Control Hardware.

Installation

The MS-1 requires one 1.75 inch (44.45 mm) high and 19 inch wide rack space with 17 inch (432 mm) depth. Mounting the unit using four screws with washers will prevent marring of the front panel. PVC or nylon washers are appropriate. The unit should also be supported at the rear to prevent bending of the enclosure and/or rack ears.

Please install the unit away from heat sources, such as vents and radiators, and in rooms with adequate ventilation. Ensure that air can circulate freely behind, beside, and above the unit. Do not exceed the maximum ambient operating temperature of 32-113 degrees F (45°C). Be aware of conditions in an enclosed rack that may cause the temperature to exceed ambient room conditions.

Add-On Features

The following features can be supported by the MS-1. Please consult the Vocia Help File for appropriate configuration.

Plug-and-Play Replacement

The MS-1 acts as a central configuration repository for all locally stored device configuration files. In case another Vocia device fails, a replacement can be connected using the same Device ID settings. The new device will retrieve the appropriate configuration from the MS-1 and set up automatically. Connection of an external PC is not required.

Comprehensive Logging and Monitoring

The MS-1 records and logs all system activities. The system log can be viewed via the Vocia software and exported using XML.

Recorded Message Storage and Playback

The MS-1 stores recorded messages for playback.

Scheduling of Recorded Messages and Events

The message scheduler provides the option of scheduling recurring recorded messages and events.

Inter-World Paging

Paging between two Vocia worlds is available if each world has an MS-1 in the system.

VoIP Paging

The MS-1 enables Voice over Internet Protocol (VoIP) access to allow paging from an attached VoIP PBX telephone system.

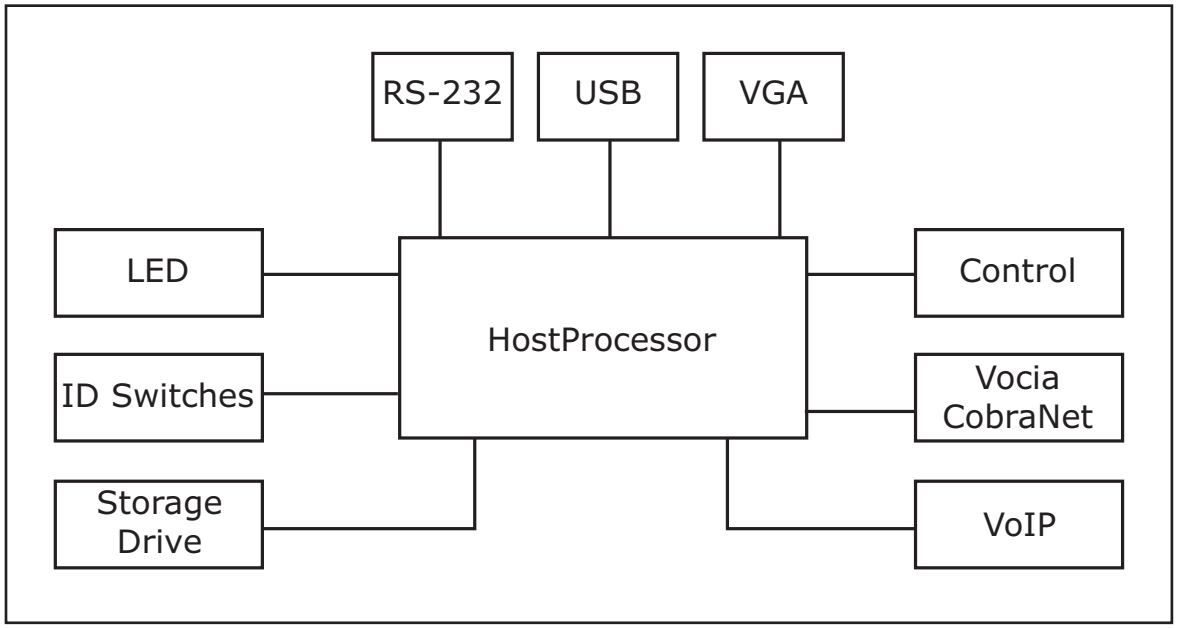
Third-Party Control

This interface enables third-party control systems to access the Vocia system remotely. More information on AMX, Crestron, and FIDS support may be found in the Vocia Help File.

Message Server 1 SPECIFICATIONS

Connection:	RJ45 with shielded Ethernet/PoE cable (CAT5, CAT5e, CAT6 or CAT7)	**Weight:**	12 lbs. (5.4 kg)
Power Consumption (100~240VAC 50/60Hz):	< 350 watts	**Ambient Operating Temperature Range:**	32-113 degrees F (0-45 degrees C)
Dimensions:		**Compliance:**	RoHS directive UL listed, CE marked
Height:	0.75 inches (44.5mm)		
Width:	19 inches (483mm)		
Depth:	17.5 inches (444 mm)		

Message Server 1 Block Diagram



MS-1 WARRANTY

BIAMP SYSTEMS IS PLEASED TO EXTEND THE FOLLOWING 5-YEAR LIMITED WARRANTY TO THE ORIGINAL PURCHASER OF THE PROFESSIONAL SOUND EQUIPMENT DESCRIBED IN THIS MANUAL

1. BIAMP Systems warrants to the original purchaser of new products that the product will be free from defects in material and workmanship for a period of 5 YEARS from the date of purchase from an authorized BIAMP Systems dealer, subject to the terms and conditions set forth below.

2 If you notify BIAMP during the warranty period that a BIAMP Systems product fails to comply with the warranty, BIAMP Systems will repair or replace, at BIAMP Systems' option, the nonconforming product. As a condition to receiving the benefits of this warranty, you must provide BIAMP Systems with documentation that establishes that you were the original purchaser of the products. Such evidence may consist of your sales receipt from an authorized BIAMP Systems dealer. Transportation and insurance charges to and from the BIAMP Systems factory for warranty service shall be your responsibility.

3. This warranty will be VOID if the serial number has been removed or defaced; or if the product has been altered, subjected to damage, abuse or rental usage, repaired by any person not authorized by BIAMP Systems to make repairs; or installed in any manner that does not comply with BIAMP Systems' recommendations.

4. Electro-mechanical fans, electrolytic capacitors, gooseneck microphones, cords connecting handheld microphones, hard-drives, displays, and normal wear and tear of items such as paint, knobs, handles, keypads and covers are not covered under this warranty. All server-based devices are warranted for 3 years only.

5. This warranty is in lieu of all other warranties, expressed or implied. BIAMP Systems disclaims all other warranties, expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose.

6. The remedies set forth herein shall be the purchaser's sole and exclusive remedies with respect to any defective product.

7. No agent, employee, distributor or dealer of BIAMP Systems is authorized to modify this warranty or to make additional warranties on behalf of BIAMP Systems. Statements, representations or warranties made by any dealer do not constitute warranties by BIAMP Systems. BIAMP Systems shall not be responsible or liable for any statement, representation or warranty made by any dealer or other person.

8. No action for breach of this warranty may be commenced more than one year after the expiration of this warranty.

9. BIAMP systems shall not be liable for special, indirect, incidental, or consequential damages, including lost profits or loss of use arising out of the purchase, sale, or use of the products, even if BIAMP Systems was advised of the possibility of such damages.

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EU RoHS COMPLIANT

This Biamp product, including all attendant cables and accessories supplied by Biamp, meets all requirements of EU Directives 2002/95/EC of January 27, 2003, and 2005/618/EC of August 18, 2005, the EU RoHS Directives. An EU RoHS Materials Content Declaration document may be obtained at www.biamp.com

(This information is presented to comply with the requirements of Chinese law SJ/T11363-2006)"

有害物质表

Biamp Systems Corporation

音频文件服务器 (Audio File Server)

MS-1

部件名称	有毒有害物质或元素					
	Pb 铅	Hg 汞	Cd 镉	Cr+6 六价铬	PBB	PBDE
设备机箱 (Equipment Chassis)	X	O	X	O	O	O
电源线 (Power Cord)	O	O	O	O	O	O
安装硬件 (Installation Hardware)	O	O	O	O	O	O
手册和其他书面文档 (Manual and Paper Documents)	O	O	O	O	O	O
包装箱和所有包装材料 (Box and Packing Materials)	O	O	O	O	O	O

0：表示该部件所有均质材料中的这种有毒有害物质低于 SJ/T11363-2006 的限制要求.

X：表示该部件中至少有一种均质材料所含的这种有毒有害物质高于 SJ/T11363-2006 的限制要求.

在电触头和（或）镀镉所含的均质材料中，镉及其化合物的含量可以超过 0.01%，但欧盟指令 91/338/EEC（根据欧盟指令 76/769/EEC）限制销售和使用某些危险物质和制剂部分中所禁止的用途除外

在以下一种或多种物质所含的均质材料中，铅及其化合物的含量可以超过 0.1%:

1) 电子元器件中玻璃内所含的铅
2) 铅在钢材中是作为一种合金元素，含量可达 0.35%
3) 铅在铝材中是作为一种合金元素，含量可达 0.4%
4) 铅在铜材中是作为一种合金元素，含量可达 4%
5) 高熔点类焊料中的铅（即铅料合金，铅含量超过 85%）
6) 电子陶瓷部件内的铅
7) 由两种以上元素组成的焊料中所含的铅，用于连接针脚和微处理器包装，其中铅的含量超过 80% 但低于 85%
8) 顺应针连接系统内的铅
9) 倒装芯片封装中半导体芯片及载体之间形成可靠连接所用焊料中的

在正常使用情况下，中国环保使用期限为 10 年，条件是：

- 环境温度为 0-40C (32-104°F)
- 湿度为 0-95%，无凝结
- 海拔高度为 0-10,000 英尺
- 气流不受阻碍
- 没有水或其他液体进入任何部件
- 电源为 110/220-Vac, 50/60 Hz, 6/3 A
- 部件没有损坏（损坏部件应立即修理）
- 由工厂授权人员使用批准的材料进行所有维修